

ABSTRACT OF THE DISCLOSURE

In the disclosed optical signal processing device,
the digital-to-analog conversion of the input optical
5 signals is realized in an optical region, without
converting the input optical signals into electric signals
for the purpose of signal processing, by splitting input
optical signals into plural sets, delaying the split
optical signals for mutually different delay amounts while
10 adjusting amplitudes of these optical signals, combining
these optical signals, and gating these optical signals on
a time axis. It is also possible to realize the processing
of the optical signals that are multiplexed on a time axis
such as interchanges of time-slots similarly.

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